

ABSTRACT OF THE DISCLOSURE

In one embodiment, a method and apparatus increases a bit load of a multicarrier system comprising a channel having a plurality of subchannels. A bit load is determined for at least one subchannel based on a target symbol error rate ϵ_s , a maximum number of symbol errors that can be corrected t , a number of symbols in an information field K , and a maximum number of transmissions k , and a number of bits per subchannel. The maximum number of symbol errors t , the number of symbols in the information field K and the maximum number of transmissions k , is selected such that a net coding gain is increased.

In another embodiment, a method determines data flow for a channel having a plurality of subchannels in a multi-carrier system. Data flow for the channel is determined in terms of an input intensity λ_{in} , and a probability of having a frame having no or a correctable number of errors p . The channel performance is adjusted in accordance with the data flow.